Notice of Allowability	Application No.	Applicant(s)	
	09/150,360	YERAZUNIS ET AL.	
	Examiner	Art Unit	
	Mehrdad Dastouri	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to *communications filed 11/28/2005, and subsequent telephonic interview dated 1/10/2006*.

2. ☒ The allowed claim(s) is/are *1-5, 7-36 and 38-40 (Renumbered 1-38)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date *9/15/1999*.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Alfred Stadnicki on January 10, 2006.The application has been amended as follows:

In the claims:

Claims 6 and 37 have been cancelled.

Claims 1-5, 7-36 and 38-40 have been replaced with the following claims:

1. A method for recording data in response to a discharge of a weapon along a target line, comprising:

sensing at least one discharge of said weapon with a weapon discharge sensor and in response to each of the at least one discharge of said weapon, generating a weapon discharge sensor output signal;

repeatedly storing video image data comprising video frames within a semiconductor memory within a video recording device mounted to said weapon;

in response to the detection of each said weapon discharge sensor output signal, preserving in said semiconductor memory within said video recording device, video image data corresponding generally to an area surrounding said target line and corresponding to at least one frame stored within said semiconductor memory prior to the respective discharge sensor output signal and at least one frame stored within said semiconductor memory subsequent to the respective discharge sensor output signal.

2. The method of claim 1 wherein said weapon comprises a gun.

3. The method of claim 1 wherein said sensing further comprises sensing the at least one discharge of said weapon with an accelerometer.

4. The method of claim 1 wherein said sensing further comprises sensing the at least one discharge of said weapon with a microphone.

5. The method of claim 1 wherein said weapon includes a trigger operative to activate a switch and said sensing further comprises sensing each of the at least one discharge of said weapon upon the sensing of a change of state of said switch.

7. The method of claim 1 wherein said repeatedly storing video image data comprising video frames within said semiconductor memory comprises storing said video frames within said semiconductor memory periodically.

8. The method of claim 1 wherein:

said storing comprises storing said video image data

associated with each of the at least one discharge of said weapon in a portion of the semiconductor memory assigned for the respective discharge; and

said preserving comprises preserving selected video image data associated with each of the at least one discharge of said weapon.

9. The method of claim 8 wherein said portion of said semiconductor memory assigned for the storage of video data associated with each successive discharge of said weapon is smaller than the portion associated with the prior discharge of said weapon.

10. The method of claim 1 further comprising:

generating an audio signal with a microphone electrically coupled to said video recording device, wherein said audio signal is representative of sound within the vicinity

of said weapon;

sampling said audio signal with an analog to digital converter to produce digital data comprising a digital representation of said audio signal; and

storing within said semiconductor memory at least some of said digital data extending temporally around each discharge of said weapon.

11. The method of claim 10 further comprising storing said digital data within said semiconductor memory employing a nonlinear quantization technique for the representation of said digital data.

12. The method of claim 1 further comprising:

generating a signal with a holster state sensor having a first state when said weapon is within a holster and a second state when said weapon is not within said holster; and

storing said video image data within said semiconductor memory only when said holster state sensor signal indicates that the holster state sensor is in said second state.

13. The method of claim 1 further comprising:

in response to each weapon discharge sensor output signal, reading selected video image data from said semiconductor memory and writing said selected video image data to a nonvolatile semiconductor memory.

14. The method of claim 13 further comprising:

preserving within said nonvolatile semiconductor memory, said stored video image data at least until said video image data is read from said nonvolatile semiconductor memory in response to a request from a user presenting a valid password to said video recording device.

15. The method of claim 1 further comprising storing date and time information within said semiconductor memory in association with at least some of the stored video image

data.

16. A data recording device for preserving data representative of video images corresponding to an area generally surrounding the target line of a weapon, comprising:

a weapon discharge sensor operative to generate a weapon discharge sensor output signal upon at least one discharge of said weapon;

at least one semiconductor memory;

a video camera operative to repeatedly generate video image data representative of said video images; and

a controller operative to cause the storage of digital data representative of said video image data within said at least one semiconductor memory at predetermined times both before and after the generation of said weapon discharge sensor output signal;

said controller being further operative to preserve selected digital data stored in said at least one semiconductor memory in response to said weapon discharge sensor output signal.

17. The data recording device of claim 16 wherein said weapon comprises a gun.

18. The data recording device of claim 16 wherein said controller is operative to preserve at least some of said digital data stored within said at least one semiconductor memory prior to generation of said weapon discharge sensor output signal and some of said digital data stored within said semiconductor memory following generation of said weapon discharge sensor output signal.

19. The data recording device of claim 16 wherein said weapon discharge sensor comprises an accelerometer mechanically coupled to said data recording device.

20. The data recording device of claim 16 wherein said weapon discharge sensor comprises a microphone.

21. The data recording device of claim 20 wherein said weapon includes a trigger and said weapon discharge sensor comprises a switch coupled to said trigger of said weapon.

22. The data recording device of claim 21 wherein said controller is operative to cause the storage of said digital data within said at least one semiconductor memory periodically.

23. The data recording device of claim 22 wherein said controller is operative to preserve digital data associated with each weapon discharge sensor output signal in a separate portion of said at least one semiconductor memory.

24. The data recording device of claim 16 wherein said at least one semiconductor memory comprises at least one dynamic random access memory.

25. The data recording device of claim 22 wherein said at least one semiconductor memory comprises at least one dynamic random access memory and a nonvolatile memory, said controller is operative to store said digital data within said dynamic random access memory periodically and said controller is further operative in response to said weapon discharge sensor output signal to cause selected digital data stored within said dynamic random access memory to be read from said dynamic random access memory and stored within said nonvolatile memory.

26. The data recording device of claim 25 wherein said nonvolatile memory comprises at least one flash memory.

27. The data recording device of claim 25 wherein said nonvolatile memory comprises at least one bubble memory.

28. The data recording device of claim 25 wherein said nonvolatile memory comprises an electrically erasable programmable random access memory.

29. The data recording device of claim 16 wherein said controller includes a bidirectional communications interface and said controller is operative in response to receipt of a read command having a specified password on said interface to transmit digital data preserved within said at least one semiconductor memory over said interface.

30. The data recording device of claim 29 wherein said bidirectional communications interface comprises a bidirectional serial interface.

31. The data recording device of claim 16 further comprising an enable sensor coupled to said controller, wherein said enable sensor is operative to produce a signal having a first state when said weapon is disposed within a holster and said enable sensor is operative to produce a signal having a second state when said weapon is not disposed within said holster, and said controller is operative to cause the storage of said digital data within said at least one semiconductor memory only when said enable sensor signal is in said second state.

32. The data recording device of claim 31 wherein said enable sensor comprises a switch.

33. The data recording device of claim 32 wherein said switch comprises a magnetically actuatable switch.

34. The data recording device of claim 33 wherein said magnetically actuatable switch comprises a magnetically actuatable reed switch.

35. The data recording device of claim 16 further comprising:

a clock operative to generate date and time information; and

a character generator operative to generate digital representations of said date and time information;

wherein said controller is operative to store at least some of said digital representations of said date and time information within said at least one semiconductor memory in association with the stored digital data.

36. A data recording device for preserving data, comprising:

a sensor configured to detect an occurrence;

a memory configured to store at least one of audio and video data such that later stored data is recorded over previously stored data;

a nonvolatile memory; and

a controller configured to transfer the data stored in the memory to the nonvolatile memory based on the detection of the occurrence by the sensor;

wherein the transferred data corresponds to a period of time beginning prior to the detection of the occurrence by the sensor and ending subsequent to the detection of the occurrence by the sensor.

38. The data recording device of claim 36, wherein:

the occurrence is a first occurrence and the period of time is a first period of time;

the sensor is further configured to detect a second occurrence; and

the controller is further configured to transfer the data stored in the memory which corresponds to a second period of time beginning prior to the detection of the second occurrence by the sensor and ending subsequent to the detection of the second occurrence by the sensor to the nonvolatile memory based on the detection of the second occurrence by the sensor.

39. The data recording device of claim 36, further comprising:

a portable housing having the sensor, the memory, the nonvolatile memory, and the controller disposed therein.

40. The data recording device of claim 36, further comprising:
a weapon;
wherein the occurrence is the firing of the weapon.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

As discussed during the telephone interview of January 10, 2006 (attached), and agreed upon between applicant's attorney, Mr. Alfred Stadnicki, and the Examiner Mehrdad Dastouri, the amendment to independent claims 1, 16 and 36 as re-written above, accurately reflects applicant's invention containing features which are neither anticipated nor rendered obvious by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (571) 272-7418. The examiner can normally be reached on Monday to Friday from 7:00 a.m. to 3:30 p.m..

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MEHRDAD DASTOURI
SUPERVISORY PATENT EXAMINER
TC 2600

Mehrdad Dastouri